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(54) **Artificial flowers.**

(57) An artificial bloom resembling a dried flower having a number of petals made from synthetic fabric in which the fabric at the tips of the petals has been melted or fused, eg. by a hot air stream, to give the appearance of a dried flower.

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This invention relates to artificial flowers and in particular an artificial flower which simulates a dried flower. Such flowers will generally include a bloom and foliage, the foliage including leaves and a main stem or side stems on which may be one or more of the blooms.

The accuracy of simulation of a real flower by an artificial flower has improved to such an extent that the latest artificial flowers can be difficult to distinguish from a real flower unless one examines the flower closely. Such artificial flowers are in general made with fabric petals, the pieces of fabric to simulate the petals being moulded to a realistic shape and coloured and/or printed to provide an accurate visual appearance.

Generally the fabric used is a woven fabric and in particular a woven polyester fabric but other artificial or synthetic yarns can be used to make the fabric. Also the fabric may have been sized with a stiffening agent to help the fabric retain its moulded shape.

It is an object of the invention to provide an artificial flower which simulates a dried flower.

According to the invention an artificial bloom having petals made of a synthetic fabric is subjected to heating directed at the tips of the petals so as to melt the material of the fabric in the region of the tips, thereby giving the artificial bloom a shrivelled, dried-up appearance.

Such a procedure is very simple yet a very realistic result is achieved.

Also, according to the invention there is provided an artificial bloom resembling a dried flower having a number of petals made from synthetic fabric in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower.

The melting or fusing of the tips of the petals has the effect of destroying the weave or individual strands or fibres making up the woven fabric in the region of the tips. It is known to heat seal the edges of cut synthetic fabrics to prevent unravelling of the weave of a cut piece of synthetic fabric. Heat sealing involves heating the edge briefly to melt the ends of the fibres to prevent their fraying. It is not intended by such heat sealing to affect the main portion or body of the fabric and the edge sealing is not usually visible in the finished product. In contrast, with the invention the heating deliberately destroys the weave of the fabric and the individual woven strands become fused together. Often as much as 10 or even 12% of the overall initial length of a petal becomes fused so that the length of the petals decreases by this amount as a result of the heating. This fusing also tends to cause a contraction width-wise of the petal and so the main body of the petal is forced to adopt a creased or wrinkled appearance, again helping to

simulate the appearance of a dried natural flower.

According to one embodiment of the invention the heating of the petal tips is achieved by directing a stream of hot air at the bloom whilst at the same time covering and shielding all but the tips of the bloom from the direct heat. Other methods of heating the petal tips are possible, however. For example the tips can be heated by infra-red heat by being passed close to one or more infra-red heaters, or the bloom can be passed close to or through a flame. In the latter case the bloom may need some form of protection to prevent the fabric material from burning or charring.

Preferably the body of the bloom is shielded from the heat. This can be achieved by placing the bloom in a recess in a mass of material which will act as a heat sink, eg a metal which has good heat conductivity, so that heat which reaches the main body of the bloom transfers to the heat sink and does not melt the material of the petals except at their tips which are left fully exposed to the hot air. The main body of the bloom may be heated to some degree and this may lead to a fading of the colours to which the fabric material is dyed and some shrinking of the material of the petals, so adding further to the realism of the simulation.

To enhance the effect of a dried flower, it is usually necessary to colour the material of the petals to a colour tone which simulates a dried or faded effect and this can easily be achieved by a correct choice of dye. In addition, edges may be dyed to a brown colour simulating the effect achieved by drying a natural flower. Thus, the heating will not generally be enough to cause sufficient fading of the colour of the main body of the petals.

By the term "bloom" we mean a flower head or flower bud of some sort. The making of such flower heads or flower buds is conventional and well known and frequently involves using a pre-moulded pedicle or stem part over which a number of printed and/or dyed textile material petals and the like are positioned together with members to help shape the blooms and a central pre-moulded stamen portion, and finally everything is held in place by a plug member which is frictionally engaged with the moulded stem part to lock all the parts together.

The invention also extends to an artificial flower and foliage resembling a dried flower spray, having one or more artificial blooms on a main stem and/or branch stems and one or more leaves joined to the main stem or branch stems, in which the or each bloom has a number of petals made from synthetic fabric, in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower, and in which the fabric at the ends of one or more leaves has also

been melted or fused to give the appearance of dried leaves.

Thus it is also possible to heat the ends or tips of some or all of the leaves to melt or fuse the ends and so give that foliage an appearance simulating dried natural foliage. Generally such artificial leaves are made in a manner similar to the petals of the bloom and so the heating of the tips of the leaves can be effected in a similar manner to the heating of the petals. Generally it is not necessary to shield the remainder of the leaf from the heat.

In addition the leaves and stem should be coloured to a colour tone simulating a dried or faded effect by the correct choice of dye. In addition, regions at the edges of leaves may be dyed a brown colour simulating the effect of a dried leaf.

An example of the manufacture of artificial dried flowers and foliage, according to the invention will now be described with reference to the accompanying drawings, in which:

Figure 1 is a cross sectional diagram of a flower head;

Figure 2 is a view of the artificial flower before the step of heating;

Figure 3 is a cross sectional diagram showing the heating step;

Figure 4 is a detail view of one petal in the finished artificial dried flower;

Figure 5 is a view of a leaflet; and

Figure 6 is a view of a combined dried flower and foliage.

As a first step the flower head 10 is pre-formed. This comprises a base 12 in the form of a synthetic plastics moulding including a short length of stem 14 in the form of the pedicle of the flower and having a hollow central core 16. Also integrally formed with the pedicle are sepals 18 which are formed by moulding portions 20 with small fabric portions 22 or by sticking the fabric portions 22 to the base 12.

In addition petals 24 are formed from fabric material such as a woven polyester fabric and are printed and shaped in a known manner. A number of these are joined and are positioned over the base 12. Shaping elements 26 in the form of stiff plastic fingers positioned around a central core are provided intermediate some or all of the petals to give the required shape. Again this is conventional. Further the pistils 28 of the flower are also pre-shaped and positioned over the petals in the centre. Everything is held in place by a central plug 30 which includes an integral downwardly extending stem 32 which is wedged or glued into the open top of the base 12.

Flower heads formed in this way are entirely conventional and well known and are not believed to require any further explanation.

The thus assembled flower head 10 is next

placed in a recess 40 in a metal body 42. The size of the recess 40 is such that the tips 44 of the petals are exposed whilst the main body of the flower head is housed within the recess and so not exposed. The tips of the flower head are then subjected to a blast of hot air from a blower 46. Conveniently the body 42 can form part of a conveying system made up of a multitude of such bodies so that flower heads can be progressively advanced and subjected to the heating step.

The blower is conveniently a commercial hot air blower with the air at a temperature of around 160 to 220° C. It is, therefore, hot enough to heat the tips 44 above a temperature at which the polyester material of the petals softens and melts. The length of time during which the petal tips are exposed to the hot air blast is chosen so that the tips 44 do melt and contract and is typically from 4 to 7 seconds. However, the enclosing of the rest of the body of the flower head in the recess 40 ensures that it is only the tips of the petals which melt. The metal body 43 ensures that the heat of any air which may enter the body of the flower is conducted away and that the body does not reach the softening or melting temperature of the polyester material. The body does, however, get hot and so some shrinkage of the polyester material of the main body of the petals may occur so giving the body a shrivelled, "dried out" appearance.

Also the body 43 holds the petals so that they are not blown and displaced by the blast of hot air. This may not always be required if, for example, the heating is by radiation from an infra-red heater or the bloom is passed through or near a flame, or if alternatively the petals are held to one another by an adhesive as is required for some artificial flowers.

As seen in Figure 4 the tips 44 have melted and in so doing the tips contract width-wise in the direction of the arrow 47 so causing the petal to wrinkle and fold, eg along the lines 48. Also some fading of the dyes used to colour the petals may occur so adding to the realism of the simulation of a dried flower.

After being removed from the air blast the flower head is allowed to cool within the recess whilst the body 40 is cooled and thereafter the finished dried flower is removed.

Either before or after being subjected to the hot air, the flower can be joined to a stem and artificial leaves in an entirely conventional manner as will be described below.

To form a flower spray 50 as shown in Figure 6, one or more leaflets 52 as shown in Figure 5 can be formed entirely conventionally from a number of polyester fabric leaves 54. These are printed to resemble a leaf and provided with veins and the like in the printing. They are also given an undulat-

ing leaf shape. The leaves 54 will be of a colour resembling a faded real leaf and may optionally have areas 56 near their edges which are, for example, coloured brown to resemble a dried out edge of a natural dried leaf.

Then a number of the leaves, in this case five, are placed in an injection mould, optionally together with a small flexible wire 58 to form a core. Synthetic plastics material is injected into the mould to envelope the wire 58 and provide a main twig stem 60 with small branches 62. The molten plastics material as it forms the small side branches 18 becomes adhered to the material of the leaves 12 and so forms a leaflet 52 as shown in Figure 5, which can then be removed from the mould once the plastics material has cooled and set sufficiently.

These leaflets 52 may now be subjected to heating directed at the ends of the leaves 54 in a similar manner to the heating of the tips of the petals 24. In this way, the fabric of the tips of some or all of the leaves will melt or fuse, so deliberately destroying the weave of the fabric, with the result that the tips of such leaves become fused, contract and often bend over, as shown in the regions 64 in Figure 5.

Finally one or more flower heads 10 are joined to a moulded stem 70 by a plug and socket connection and one or more of the leaflets 52 joined onto side spurs 72 formed in the stem, again by a plug and socket connection.

Claims

1. A method of making an artificial bloom resembling a dried flower in which an artificial bloom having petals made of a synthetic fabric is subjected to heating directed at the tips of the petals so as to melt the material of the fabric in the region of the tips, thereby giving the artificial bloom a shrivelled, dried-up appearance.
2. A method of making an artificial bloom resembling a dried flower in which an artificial bloom having petals made of a synthetic fabric is subjected to heating directed at the tips of the petals whilst the main body of the bloom is protected from the heat so as to melt the material of the fabric in the region of the tips, thereby giving the artificial bloom a shrivelled, dried-up appearance.
3. A method as claimed in Claim 1 or Claim 2 in which the heating is achieved by directing a stream of hot air at the bloom whilst at the same time covering and shielding all but the tips of the bloom from the direct heat.
4. A method as claimed in Claim 3 in which the body of the bloom is shielded from the heat by being received in a recess in a mass of material which will act as a heat sink.
5. A method as claimed in Claim 1 or Claim 2 in which the heating is achieved by directing a stream of hot air at the top of the bloom.
6. A method as claimed in any preceding claim in which the synthetic fabric of the petals is a woven polyester fabric.
7. A method as claimed in any preceding claim in which up to 12% of the original overall length of the petals has been melted or fused.
8. An artificial bloom resembling a dried flower when made by a method as claimed in any preceding claim.
9. An artificial bloom resembling a dried flower having a number of petals made from synthetic fabric in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower.
10. An artificial bloom as claimed in Claim 9 in which the synthetic fabric of the petals is a woven polyester fabric.
11. An artificial flower and foliage resembling a dried flower spray, having one or more artificial blooms on a main stem and/or branch stems and one or more leaves joined to the main stem or branch stems, in which the or each bloom has a number of petals made from synthetic fabric, in which the fabric at the tips of the petals has been melted or fused to give the appearance of a dried flower, and in which the fabric at the ends of one or more leaves has also been melted or fused to give the appearance of dried leaves.
12. An artificial flower and foliage as claimed in Claim 11 in which the colouring of the leaves, stem and/or branch stems has been chosen to simulate the colouring of dried natural foliage.

FIG. 1

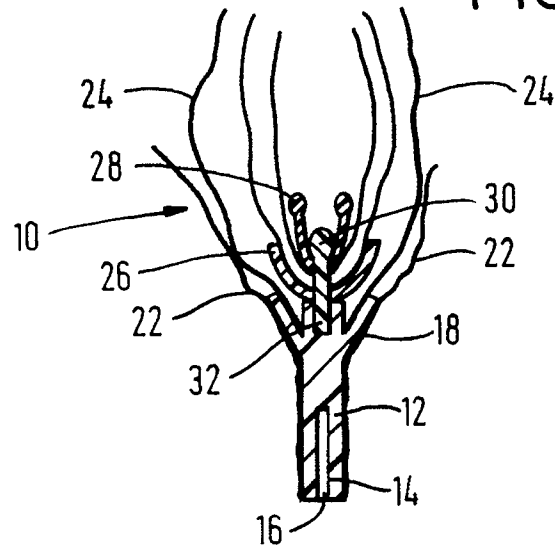
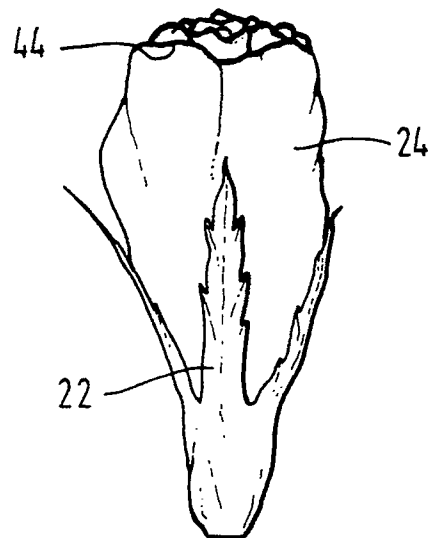
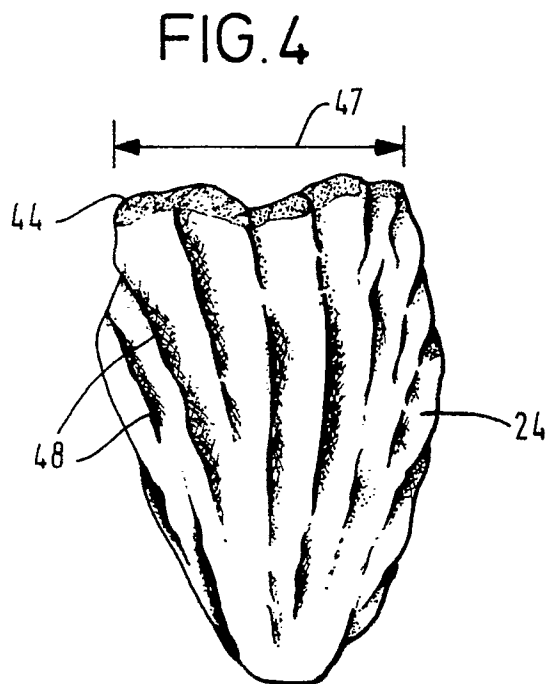
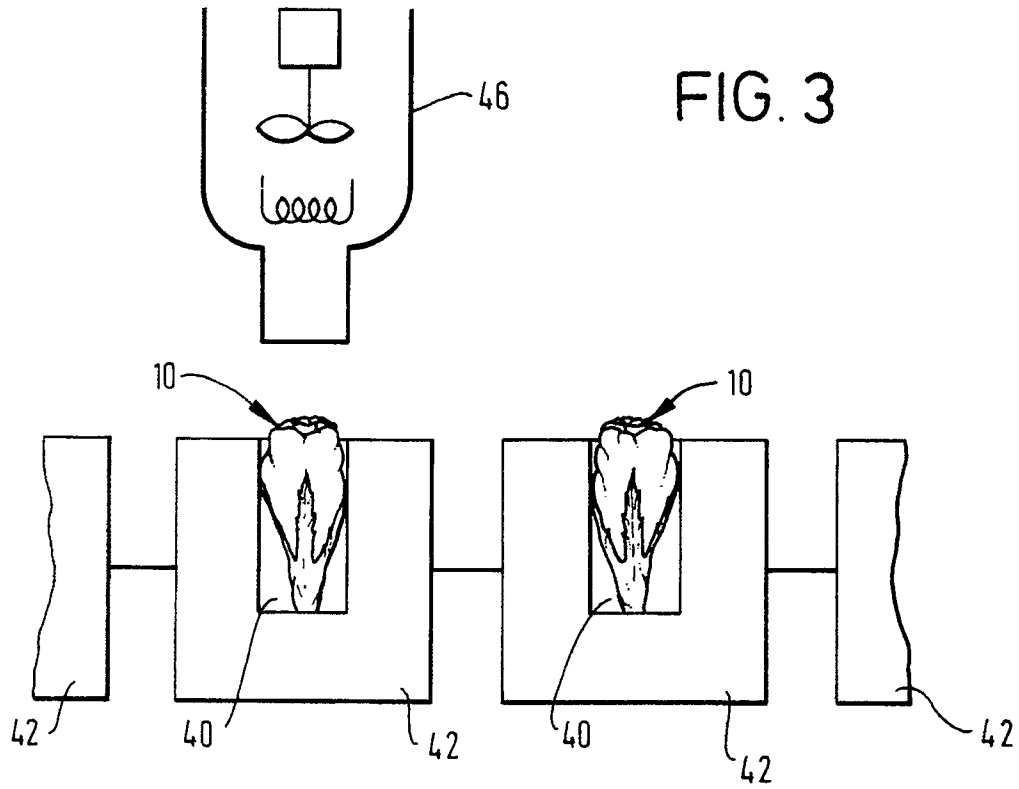


FIG. 2





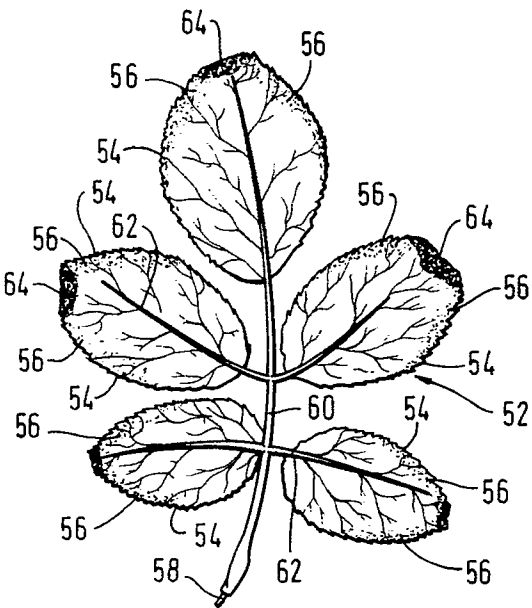


FIG. 5

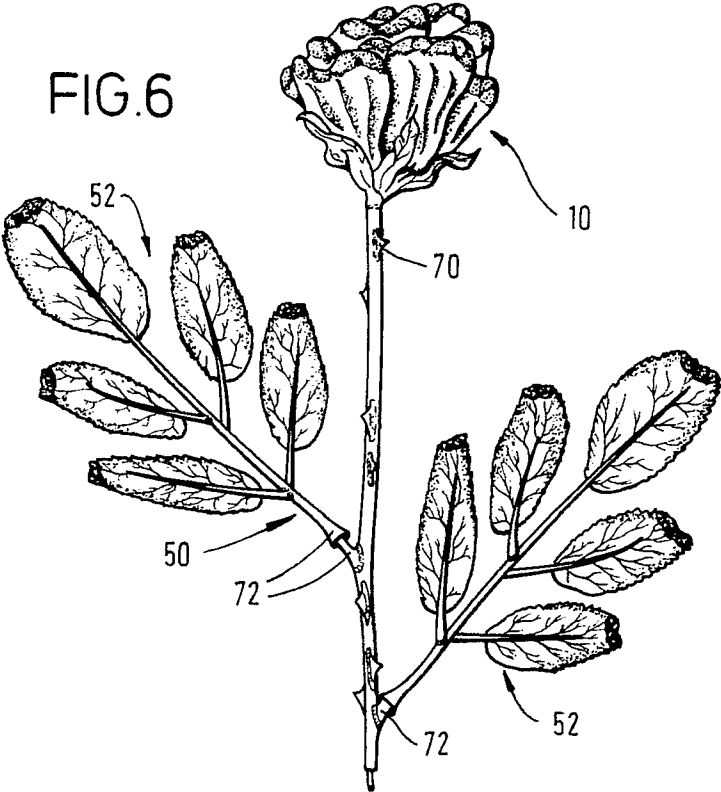


FIG. 6